

REMARKS

The Office Action dated May 31, 2005 has been received and considered. In this response, claims 1, 2, 11-13, 17, 19, 25, 27-29, and 33-40 have been amended, claims 10, 15, 16, and 23 have been canceled and new claim 41 has been added. Support for the amendments to the claims and the addition of the new claim may be found in the specification and drawings as originally filed. Reconsideration of the outstanding objections and rejections in the present application is respectfully requested based on the following remarks.

Objection to the Specification

It is suggested at section 2 of the Office Action that a brief Summary of the Invention be included within the specification. It is respectfully submitted that no Summary of the Invention section is to be provided, as allowed by the suggestive language of 37 C.F.R. § 1.77(b) requesting, but not requiring, said Summary. Reconsideration and withdrawal of this objection therefore is respectfully requested.

Anticipation Rejections of Claims 1-6, 8-10, 13, 14, and 33-36

At sections 4-19 of the Office Action, claims 1-6, 8-10, 13, 14, and 33-36 are rejected under 35 U.S.C. Section 102(b) as being anticipated by Easter et al. (U.S. Patent No. 5,563,950). This rejection is respectfully traversed.

Claim 1, from which claims 2-6, 8, 9, 13, and 14 depend, has been amended to recite the features as substantially provided by claims 15 and 16 (now canceled). Independent claim 33, from which claims 34-36 depend, has been similarly amended. At section 4, the Office Action acknowledges that Easter fails to disclose these additional features previously recited by claims 15 and 16. Accordingly, Easter fails to disclose the particular combinations of features presently recited by claims 1 and 33, as well as the particular combination of features recited by claims 2-6, 8, 9, 13, 14, and 34-36 at least by virtue of their dependency from one of the claims 1 or 33. Reconsideration of withdrawal of the anticipation rejection of claims 1-6, 8-10, 13, 14, and 33-36 therefore is respectfully requested.

Obviousness Rejections of Claims 7, 11, 12, 17-19, 20-27, 30-32, and 37-40

At sections 21 and 22 of the Office Action, claim 7 is rejected under 35 U.S.C. Section 103(a) as being unpatentable over Easter in view of Loh et al. (U.S. Patent Application Publication No. 2003/0093661). At sections 23-42, claims 11, 12, 17-19, 21-27, 30-32, and 37-40 are rejected under 35 U.S.C. Section 103(a) as being unpatentable over Easter in view of Pitts (U.S. Patent Application Publication No. 2001/0145931). At sections 48 and 49 of the Office Action, claim 20 is rejected under 35 U.S.C. Section 103(a) as being unpatentable over Easter in view of Pitts and further in view of Loh. These rejections are respectfully traversed.

Claim 1 has been amended to recite additional features as substantially presented by dependent claims 15 and 16 (now canceled). Independent claims 17 and 33 have been similarly amended. As noted above, the Office Action acknowledges that Easter fails to disclose these additional features. The Office Action does not assert that Pitts discloses or suggests any of these additional features, nor does Pitts in fact disclose or suggest any of these features. Accordingly, the proposed combinations of Easter, Pitts and Loh fail to disclose the particular combinations of features recited by claims 7, 11, 12, 17-19, 20-27, 30-32, and 37-40 at least by virtue of their dependency from one of independent claims 1, 17 or 33. Reconsideration of withdrawal of these obviousness rejections therefore is respectfully requested.

Obviousness Rejection of Claims 15, 16, 28, and 29

At sections 43-47 of the Office Action, claims 15, 16, 28, and 29 are rejected under 35 U.S.C. Section 103(a) as being unpatentable over Easter in view of Van Oorschot et al. (U.S. Patent No. 5,585,043). This rejection is respectfully traversed.

As discussed above, claim 1 has been amended to substantially recite the additional features of claims 15 and 16. Accordingly, claim 1 presently recites the features of a monolithic semiconductor device comprising a memory location having an output port, wherein a data value to be stored in said memory location is observable only internally to the monolithic semiconductor device, an asymmetrical encryption engine having an input port coupled to the output port of the memory location and an output port to provide a symmetrical encryption key based on the data value, and a symmetrical encryption engine having an input port coupled to an

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output port of the asymmetrical encryption engine, wherein the symmetrical encryption engine is to perform an encryption function using the symmetrical encryption key. With respect to claim 15, the Office Action acknowledges that Easter does not disclose

A second encryption engine having an input coupled to the output port of said first encryption engine, and wherein said first encryption engine is a asymmetrical encryption engine and said second encryption is a symmetrical encryption engine.

Office Action, para. 44. The Office Action therefore relies on Van Oorschot and asserts that the passage of Van Oorschot at col. 5, lines 39-59 disclose these features. For ease of discussion, the relied upon passage of Van Oorschot is reproduced in its entirety below:

According to another aspect, the invention is directed to an apparatus for complementary cryptographic operations, such as encryption and decryption, in different degrees of security strength. The apparatus comprises either one or both of a first symmetric encryption module for use in encrypting data in high-trust environments which uses a strong cryptographic process, and a second encryption module for use in encrypting data in low-trust environments which uses a less strong symmetric cryptographic process; together with one or both of a first asymmetric encryption/decryption module for use in key transfer providing a security strength commensurate with a high-trust level environment, and a second asymmetric encryption/decryption module for use in key transfer providing a security strength commensurate with a low-trust environment; and finally, also includes a module providing a mechanism capable of determining the source of received cryptographically protected information, allowing a decision to be made to allow proper recovery of an asymmetrically-encrypted symmetric key to allow such key to be used to decrypt symmetrically-encrypted plaintext data.

Van Oorschot, col. 5, lines 39-59. Regardless whether Van Oorschot discloses or suggests a first encryption engine or a second encryption engine, or more particularly, an asymmetrical encryption engine and a symmetrical encryption engine, Van Oorschot fails to disclose or suggest an asymmetrical encryption engine that has an output port to provide a symmetrical encryption key based on a data values stored in the memory location observable only internally to a monolithic semiconductor device as recited by claim 1. Further, Van Oorschot fails to disclose or suggest an asymmetrical encryption engine having an input port coupled to the output port of the asymmetrical encryption engine, wherein the asymmetrical encryption engine performs an encryption function using an asymmetrical encryption key as also recited by claim 1. Additionally, Van Oorschot fails to disclose or suggest the similar features presently recited by claims 17 and 33. Accordingly, the proposed combination of Easter and Van Oorschot fails to

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disclose or suggest each and every feature recited by claims 1, 17, and 33, as well as each and every feature recited by their dependent claims. Accordingly, reconsideration and withdrawal of the obviousness rejection of claims 15, 16, 28, and 29 is respectfully requested.

Addition of New Claim 41

New claim 41 has been added. New claim 41 has substantially the same scope as claim 1 and its dependent claim 13 as originally filed. At Section 14 of the Office Action, the Office Action asserts that Easter discloses the features recited by claim 13. In particular, the Office Action references FIG. 2 of Easter and the passage of Easter at col. 4, lines 50-65. However, contrary to the assertions of the Office Action, the cited passage of Easter does not disclose or suggest the features of silicon die pads in any manner, much less the claimed features of at least one silicon die pad having input coupled to the output port of the memory location to provide temporary access to said memory location as previously recited by claim 13 and presently recited by claim 41. None of the cited references discloses or suggests at least these features. Accordingly, claim 41 is allowable over the cited references.

Conclusion

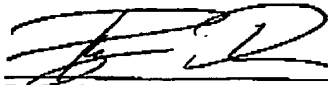
The Applicant respectfully submits that the present application is in condition for allowance and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

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The Commissioner is hereby authorized to charge any fees that may be required, or credit any overpayment, to Deposit Account Number 50-1835.

Respectfully submitted,

30 September 2005
Date


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